

“New species, varieties, and combinations from the herbarium and the collections of the Arnold Arboretum,” by ALFRED REHDER (pp. 44–60); “A phytogeographical sketch of the ligneous flora of Korea,” by E. H. WILSON (pp. 32–43); and the fifth paper by C. S. SARGENT entitled “Notes on North American trees” (pp. 61–65).—J. M. C.

Toxicity of alpha-crotonic acid.—Alpha-crotonic acid, in concentrations of 25–50 p.p.m., is very toxic to wheat plants. Its toxicity is markedly reduced by the phosphate radical, as SKINNER and REID¹² show by using it in water cultures of wheat with a three-salt medium varying according to the triangle system. The crotonic acid does not affect the relative absorption of any one salt, thus differing from some of the other toxic organic compounds studied in SCHREINER’S laboratory. The real nature of the antagonism is not known.—J. J. WILLAMAN.

New genera.—NAKAI¹³ has described a new genus of Oleaceae (*Abeliophyllum*), found in Corea. It is an endemic and related to *Fontanesia* (Fraxineae), a monotypic oriental genus.

PENNELL¹⁴ has described a new genus of Onagraceae (*Peniophyllum*), based on *Oenothera linifolia* as the type. In a conspectus of *Kneiffia* (*Oenothera*) he recognizes 13 species, 4 of which are described as new.—J. M. C.

Plant mucilage.¹⁵—The mucilage in cacti, mallows, tragacanth, and lilies arises in special large cells by hydrolysis of the cellulose wall, a hydrocellulose being an intermediate stage. These walls are not secondarily thickened. An account is given of the reaction of these mucilages to various stains.—J. J. WILLAMAN.

Germination.—RUSSELL¹⁶ finds that the germination of camphor seeds in the commercial seed bed is greatly improved by removing the pulp. By pulping the seeds the increase in the number of seeds of transplantable size amounted to 60 per cent.—WM. CROCKER.

¹² SKINNER, J. J., and REID, F. R., The influence of phosphates on the action of alpha-crotonic acid on plants. *Amer. Jour. Bot.* 6:167–180. 1919.

¹³ NAKAI, TAKENOSHIN, Genus novum Oleacearum in Corea media inventum. *Bot. Mag. Tokyo* 33:153, 154. 1919.

¹⁴ PENNELL, F. W., A brief conspectus of the species of *Kneiffia*, with the characterization of a new allied genus. *Bull. Torr. Bot. Club* 46:363–373. 1919.

¹⁵ LLOYD, F. C., Origin and nature of the mucilage in the cacti and in certain other plants. *Amer. Jour. Bot.* 6:156–166. 1919.

¹⁶ RUSSELL, G. A., Effect of removing the pulp from camphor seed on germination and the subsequent growth of the seedling. *Jour. Agric. Research* 17:223–238. 1919.